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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Parts 223 and 224

[Docket No. 111024651-1650-01]

RIN 0648-XA739

Listing Endangered and Threatened Wildlife and Plants; 90-Day Finding on a Petition to List Alewife and Blueback Herring as Threatened Under the Endangered Species Act

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: 90-day petition finding; request for comments.

SUMMARY: We, NMFS, announce a 90-day finding for a petition to list alewife (*Alosa pseudoharengus*) and blueback herring (*Alosa aestivalis*) as threatened under the Endangered Species Act and to designate critical habitat concurrent with a listing. We find that the petition presents substantial scientific information indicating the petitioned action may be warranted. Accordingly, we will conduct a review of the status of alewife and blueback herring, collectively referred to as river herring, to determine if the petitioned action is warranted. To ensure that the review is comprehensive, we solicit information pertaining to this species from any interested party.

DATES: Information related to this petition finding must be received by **[insert date 60 days after date of publication in the FEDERAL REGISTER]**.

ADDRESSES: You may submit comments, identified by the RIN 0648-XA739, by any of the following methods:

- Electronic Submissions: Submit all electronic public comments via the Federal eRulemaking Portal <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail or hand-delivery: Assistant Regional Administrator, NMFS, Northeast Regional Office, 55 Great Republic Drive, Gloucester, MA 01930.

All comments received are a part of the public record and will generally be posted to <http://www.regulations.gov> without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information.

NMFS will accept anonymous comments. Attachments to electronic comments will be accepted in Microsoft Word, Excel, WordPerfect, or Adobe PDF file formats only.

The petition and other pertinent information are also available electronically at the NMFS website at <http://www.nero.noaa.gov/protected/CandidateSpeciesProgram/RiverHerringSOC.htm>.

FOR FURTHER INFORMATION CONTACT: Kim Damon-Randall, NMFS, Northeast Regional Office (978) 282-8485 or Marta Nammack, NMFS, Office of Protected Resources (301) 713-1401.

SUPPLEMENTARY INFORMATION:

Background

On August 5, 2011, we, the National Marine Fisheries Service (NMFS), received a petition from the Natural Resources Defense Council (NRDC), requesting that we list alewife (*Alosa pseudoharengus*) and blueback herring (*Alosa aestivalis*) each as threatened throughout all or a significant portion of their range under the Endangered Species Act (ESA). In the

alternative, they requested that NMFS designate distinct population segments (DPS) of alewife and blueback herring as specified in the petition (Central New England (CNE), Long Island Sound (LIS), Chesapeake Bay (CB) and Carolina for alewives, and CNE, LIS, and CB for blueback herring). The petition contains information on the two species, including the taxonomy; historical and current distribution; physical and biological characteristics of the species' habitat and ecosystem relationships; population status and trends; and factors contributing to the species' decline. NRDC also included information regarding the possible DPSs of alewife and blueback herring as described above. The petition addresses the five factors identified in section 4(a)(1) of the ESA: (1) present or threatened destruction, modification, or curtailment of habitat or range; (2) over-utilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; and (5) other natural or man-made factors affecting the species' continued existence.

ESA Statutory Provisions and Policy Considerations

Section 4(b)(3)(A) of the ESA (16 U.S.C. 1533(b)(3)(A)) requires that we make a finding as to whether a petition to list, delist, or reclassify a species presents substantial scientific or commercial information indicating the petitioned action may be warranted. ESA implementing regulations define substantial information as the amount of information that would lead a reasonable person to believe the measure proposed in the petition may be warranted (50 CFR 424.14(b)(1)). In determining whether substantial information exists for a petition to list a species, we take into account several factors, including information submitted with, and referenced in, the petition and all other information readily available in our files. To the

maximum extent practicable, this finding is to be made within 90 days of the receipt of the petition (16 U.S.C. 1533(b)(3)(A)), and the finding is to be published promptly in the Federal Register. If we find that a petition presents substantial information indicating that the requested action may be warranted, section 4(b)(3)(A) of the ESA requires the Secretary of Commerce (Secretary) to conduct a review of the status of the species. Section 4(b)(3)(B) requires the Secretary to make a finding as to whether the petitioned action is warranted within 12 months of the receipt of the petition. The Secretary has delegated the authority for these actions to the NOAA Assistant Administrator for Fisheries.

The ESA defines an endangered species as “any species which is in danger of extinction throughout all or a significant portion of its range (ESA section 3(6)).” A threatened species is defined as a species that is “likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range (ESA section 3(19)).” As stated previously, under section 4(a)(1) of the ESA, a species may be determined to be threatened or endangered as a result of any one of the following factors: (1) present or threatened destruction, modification, or curtailment of habitat or range; (2) over-utilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; or (5) other natural or manmade factors affecting its continued existence. Listing determinations are made solely on the basis of the best scientific and commercial data available, after conducting a review of the status of the species and taking into account efforts made by any state or foreign nation to protect such species.

Under the ESA, a listing determination can address a species, subspecies, or a DPS of a vertebrate species (16 U.S.C. 1532 (16)). NRDC presents information in the petition proposing

that DPSs of alewife and blueback herring are present in the United States and indicating that it may be appropriate to divide the population into DPSs of alewife and blueback herring as specified in the petition. If we find that listing at the species level is not warranted, we will determine whether any populations of these species meet the DPS policy criteria, and if so, whether any DPSs are endangered or threatened under the ESA.

Life History of Alewife and Blueback Herring

Alewife and blueback herring are collectively referred to as “river herring.” Due to difficulties in distinguishing between the species, they are often harvested together in commercial and recreational fisheries, and managed together by the Atlantic States Marine Fisheries Commission (ASMFC). Throughout this finding, where there are similarities, they will be collectively referred to as river herring, and where there are distinctions they will be identified by species.

River herring can be found along the Atlantic coast of North America, from the maritime provinces of Canada to the southeastern United States (Mullen *et al.*, 1986; Shultz *et al.*, 2009). The coastal ranges of the two species overlap, with blueback herring found in a greater and more southerly distribution ranging from Nova Scotia down to the St. John’s River, Florida; and alewife found in a more northerly distribution, from Labrador and Newfoundland to as far south as South Carolina, though the extreme southern range is a less common occurrence (Collette and Klein-MacPhee, 2002; ASMFC, 2009a; Kocik *et al.*, 2009). Adults are most often found at depths less than 100 m (328 ft) in waters along the continental shelf (Neves, 1981; ASMFC, 2009a; Shultz *et al.*, 2009).

River herring have a deep and laterally compressed body, with a small, pointed head with

relatively large eyes, and a lower jaw that protrudes further than the upper jaw (Collette and Klein-MacPhee, 2002). The dorsal fin is small and slightly concave, pelvic fins are small, pectorals are moderate and low on the body, and the caudal fin is forked (Collette and Klein-MacPhee, 2002).

The coloring varies, ranging from dark blue and bluish green to grayish green and bluish gray dorsally; and silvery with iridescence in shades of green and violet on the sides and abdomen. In adults, there is often a dusky spot that is located at eye level on both sides behind the margin of the gill cover. The colors of alewife are thought to change in shade according to substrate as the fish migrates upstream, and sea run fish are thought to have a golden cast to their coloring (Collette and Klein-MacPhee, 2002).

Blueback herring and alewife are similar in appearance; however, there are some distinguishable characteristics: eye diameter and the color of the peritoneum. The eye diameter with alewives is relatively larger than that of blueback herring. In blueback herring, the snout length is generally the same as the eye diameter; however with alewives, the snout length is smaller than the diameter of the eye (Collette and Klein-MacPhee, 2002). In alewives, the peritoneum is generally pale/light gray or pinkish white, whereas the peritoneum in blueback herring is generally dark colored and either brown or black, and sometimes spotted (Collette and Klein-MacPhee, 2002; ASMFC, 2009a).

River herring are anadromous, meaning that they migrate up coastal rivers in the spring from the marine environment, to estuarine and freshwater rivers, ponds, and lake habitats to spawn (Collette and Klein-MacPhee, 2002; ASMFC, 2009a; Kocik et al., 2009). They are highly migratory, pelagic, schooling species, with seasonal spawning migrations that are cued by water

temperature (Collette and Klein-MacPhee, 2002; Schultz, 2009). Depending upon temperature, blueback herring typically spawn from late March through mid-May. However, they have been documented spawning in the southern parts of their range as early as December or January, and as late as August in the northern range (ASMFC, 2009a). Alewives generally migrate earlier than other alosine fishes, but have been documented spawning as early as February to June in the southern portion of their range, and as late as August in the northern portion of the range (ASMFC, 2009a). It is thought that river herring return to their natal rivers for spawning, and do exhibit natal homing. However, colonization of streams where river herring have been extirpated has been documented; therefore, some effective straying does occur (ASMFC, 2009a).

Throughout their life cycle, river herring use many different habitats ranging from the ocean, up through estuaries and rivers, to freshwater lakes and ponds. The substrate preferred for spawning varies greatly and can include substrates consisting of gravel, detritus, and submerged aquatic vegetation. Blueback herring prefer swifter moving waters than alewife (ASMFC, 2009a). Nursery areas can include freshwater and semi-brackish waters; however, little is known about their habitat preference in the marine environment (Meadows, 2008; ASMFC, 2009a).

Analysis of Petition and Information Readily Available in NMFS Files

In the following sections, we use the information presented in the petition and in our files to: (1) describe the distribution of alewife and blueback herring; and (2) evaluate whether alewife and blueback herring are at abundance levels that would lead a reasonable person to conclude that listing under the ESA may be warranted due to any of the five factors listed under section 4(a)(1) of the ESA.

Abundance

The NRDC asserts that alewife and blueback herring populations have suffered dramatic declines over the past 4 decades (ASMFC, 2008). The NRDC cites the ASMFC as stating that alewife and blueback herring harvest averaged almost 43 million pounds (19,504 metric tons (mt)) per year from 1930 to 1970. NRDC also cites ASMFC (2008) in stating that peak harvest occurred in the late 1940s and early 1950s and was highest in Virginia and North Carolina. The NRDC notes that commercial landings of river herring began declining sharply coastwide in the 1970s. However, ASMFC (2009a) reports that 140 million pounds (63,503 mt) of river herring were commercially landed in 1969, marking the peak in river herring catch; this is a discrepancy from what is stated in the petition. From the peak landings in 1969, landings declined to a point where domestic landings recently (2000-2007) exceeded only 2 million pounds (907 mt) yearly (ASMFC, 2009a). Declines in catch per unit effort (CPUE) have also been observed in two rivers for blueback herring and for alewife, and declining trends in CPUE for the combined species were also observed in two out of three rivers examined (ASMFC, 2009a).

ASMFC (2009a) also reports declines in abundance through run size estimates for river herring combined, as well as for individual species of alewife and blueback herring. Abundance declined in seven out of fourteen rivers in New England from the late 1960s to 2007, with no obvious signs of recovery; however, since 2004, there have been some signs of recovery in five out of fourteen rivers (ASMFC, 2009a). Coastwide declines have been observed, particularly in southern New England (Davis and Schultz et al., 2009). In the Connecticut River the number of blueback herring passing Holyoke Dam declined from 630,000 in 1985 to a low of 21 in 2006 (Schultz et al., 2009).

ESA Section 4(a)(1) Factors

Present or Threatened Destruction, Modification or Curtailment of Habitat or Range

In the petition, the NRDC states that habitat alterations, loss of habitat, and impaired water quality have contributed to the decline of river herring since colonial times. NRDC further states that climate change now poses an increasing threat as well. NRDC states that dams and turbines block access to spawning and foraging habitat, may directly injure or kill passing fish, and change water quality through alterations in flow and temperature, which NRDC asserts is significantly impacting river herring. NRDC cites ASMFC (2009b) which indicates that flow variations caused by dams, particularly hydropower dams, can displace eggs as well as disrupt migration patterns, which will adversely affect the survival and productivity of all life stages of river herring as well as other anadromous fish. ASMFC (2009b) indicates that increased flows at dams with fishways can also adversely affect the upstream migration of adults, impeding their ability to make it up through the fishway, as well as the downstream migration of juveniles, causing an early downstream migration and higher flows through sluiceways resulting in mortality. According to NRDC, dams have caused river herring to lose access to significant portions of their spawning and foraging habitat. In addition to altering flow and changing environmental parameters such as temperature and turbidity, NRDC indicates that dams, particularly hydropower dams, cause direct mortality to various life stages of river herring through entrainment and impingement in turbines, and changing water pressures. In addition, NRDC states that turbines used in tidal hydroelectric power plants may impact river herring with each tidal cycle as the fish migrate through the area.

Dredging and blasting were also identified by NRDC as significant threats to river herring. The petition cites ASMFC (2009b), asserting that increased suspended sediment,

changes in water velocities, and alteration of substrates through dredging can directly impact river herring habitat. In addition, NRDC asserts that these operations may affect migration patterns and spawning success, and they can directly impact gill tissues, producing near fatal effects (NMFS, 1998; ASMFC, 2009b).

The NRDC also asserts that water quality poses a significant threat to river herring through changes in water temperature and flow, introduction of toxic pollutants, discharge, erosion, and nutrient and chemical run-off (ASMFC, 2009b). NRDC states that “poor water quality alone can significantly impact an entire population of alewife or blueback herring.” ASMFC (2008) notes that significant declines in dissolved oxygen (DO) levels in the Delaware River during the 1940s and 1950s from heavy organic loading made portions of the river during the warmer months of the year uninhabitable to river herring. ASMFC (2008, 2009a) indicates that river herring abundance is significantly affected by low DO and hypoxic conditions in rivers and that these conditions may also prevent spawning migrations.

River herring susceptibility to toxic chemicals and metals was also identified by NRDC as a threat to the species. The NRDC asserts that river herring are subjected to contaminants through their habitat, which may be contaminated with dioxins, polychlorinated aromatic hydrocarbons, organophosphate and organochlorine pesticides, polychlorinated biphenyls, and other hydrocarbon compounds, as well as toxic metals. Citing ASMFC (1999), the NRDC states that because of industrial, residential, and agricultural development, heavy metal and various types of organic chemical pollution has increased in nearly all estuarine waters along the Atlantic coast, including river herring spawning and nursery habitat. NRDC asserts that these contaminants can directly impact fish through reproductive impairment, reduced survivorship of

various life stages, and physiological and behavioral changes (ASSRT, 2007; 75FR 61872).

The NRDC also identified climate change as a threat to river herring habitat. According to NRDC, the spatial distribution, migration, and reproduction of alewife may be affected through rising water temperatures caused by climate change. Citing the International Panel on Climate Change (IPCC) (2001), NRDC states that fish larvae and juveniles may have a high sensitivity to water temperature and suggests that headwaters and rivers may be more vulnerable; thus, the effects of climate change may be more significant to anadromous species, which utilize a multitude of habitats. According to ASMFC (2009b), as water temperatures rise, the upstream spawning migration of alewife declines, and will mostly cease once temperatures have risen above 21 degrees Celsius. In addition to increasing water temperatures, climate change may affect river herring through increased precipitation that may affect rivers and estuaries along the coast. Citing Kerr *et al.* (2009), the NRDC reports that a 10 percent increase in annual precipitation is expected in the Northeast United States from 1990 to 2095 and that precipitation has already increased 8 percent over the past 100 years (Markham and Wake, 2005). As increased water flows may affect anadromous fish migration, increased precipitation and the potential for flooding in rivers due to climate change may pose a significant threat to river herring (Limburg and Waldman, 2009).

Overutilization for Commercial, Recreational, Scientific or Education Purposes

The NRDC identified direct harvest, bycatch, and incidental catch as significant threats to river herring. River herring were historically fished through inshore fisheries, and constitute one of the oldest fisheries in North America (Haas-Castro, 2006). Commercial landings of river herring reached nearly 34,000 metric tons (mt) in the 1950s, but in the 1970s, landings fell below

4,000 mt. According to ASMFC (2008), foreign commercial exploitation of river herring in the 1960s led to drastic declines in abundance of river herring. Annual commercial landings over the past decade have varied from 137 mt to 931 mt, and 90 percent of this catch was typically harvested by Maine, North Carolina, and Virginia fisheries (Haas-Castro, 2006). Historically, river herring were targeted for food, bait and fertilizer purposes; however, they are currently most often used for bait in commercial fisheries (Collette and Klein-MacPhee, 2002). The NRDC contends that declines in river herring abundance are greatly affected by commercial overharvest, noting that direct harvest of river herring currently takes place in Maine, New Hampshire, New York, New Jersey, some rivers in Delaware, Maryland, Virginia, and South Carolina.

Bycatch and incidental catch were also identified by NRDC as resulting in significant mortality of river herring, stating that this catch occurs in both state and Federal waters. NRDC asserts that the anadromous life history of river herring presents the potential for increased bycatch due to the species schooling behavior at congregation sites throughout different portions of migration. Citing Lessard and Bryan (2011), NRDC indicates that “hot spots” of bycatch and incidental catch have been found in the winter between Cape Cod and Cape Hatteras, in the spring with blueback herring in the southern region, and in the fall in the Gulf of Maine and Georges Bank. The NRDC states that a variety of sources including landings records, log books, portside sampling efforts, and the NMFS observer program provide information on bycatch and incidental catch, asserting that most of these sources are likely to underestimate the amount of bycatch that occurs.

The NRDC cites Lessard and Bryan (2011) in stating that the majority of bycatch of river

herring is taken with mid-water otter paired trawls, and that catch with this gear type appears to be increasing from 2000-2008, with an estimation of around 500,000 to 2.5 million pounds (227 to 1,134 mt) of river herring caught annually as bycatch. In addition, the NRDC asserts that the Atlantic herring and Atlantic mackerel fisheries are increasing their use of single and pair mid-water trawls, and are using larger, more efficient nets, increasing the effort and efficiency in this fishery. The petition further outlines specific overharvesting issues within the Damariscotta, Hudson, Delaware, Potomac, Chowan, Santee-Cooper, and the St. John's Rivers, as well as Chesapeake Bay and Albermarle Sound.

Predation and Disease

The NRDC identifies predation and disease as another threat facing river herring. Citing the Maine Department of Marine Resources (ME DMR) (2003), NRDC states that river herring may be preyed upon by striped bass, bluefish, tuna, cod, haddock, halibut, American eel, brook trout, rainbow trout, brown trout, lake trout, landlocked salmon, smallmouth bass, largemouth bass, pickerel, pike, white and yellow perch, seabirds, bald eagle, osprey, great blue heron, gulls, terns, cormorants, seals, whales, otter, mink, fox, raccoon, skunk, weasel, fisher, and turtles. It asserts that the decline of some populations of river herring is due to increased predation, citing ASMFC (2008) as noting a concern with increasing striped bass abundance, and identifying predation by striped bass as contributing significantly to the decline of river herring in some rivers. Additionally, many species of cormorants along the coast are increasing in abundance, and predation on alosines by cormorants has been increasing, although Dalton *et al.* (2009) suggested that the double-crested cormorant is not believed to pose an immediate threat to the recovery of alewife in Connecticut.

According to the NRDC, significant cumulative mortality can occur with viral hemorrhagic septicemia, which is a viral infection known to infect certain anadromous fish, including river herring. Additionally, NRDC asserts that when levels of suspended solids are present during spawning, alewife eggs are significantly more likely to contract a naturally occurring fungus infection.

Inadequacy of Existing Regulatory Mechanisms

The NRDC states that state and Federal regulatory mechanisms are insufficient and contributing to drastic declines in river herring populations that continue throughout all or a significant portion of the species' ranges. Due to difficulties in distinguishing between the species, alewife and blueback herring are managed together by the ASMFC as river herring. NRDC states that ASMFC has the authority to develop and issue interstate fishery management plans (FMP) for fisheries administered by the state agencies and will coordinate management with Federal waters.

According to NRDC, ASMFC adopted an amendment to the coast-wide FMP for American shad and river herring in 2009, to specifically address the declining river herring populations coastwide. The petition asserts that this amendment is not likely to protect river herring sufficiently, as it “does not require, and is not likely to result in, adequate measures to reduce significant incidental catch and bycatch/bycatch mortality of these species, particularly in federal waters.” NRDC also asserts that this amendment does not address non-fishing stressors on river herring sufficiently. The petition further states that four states have already had prohibitions on the harvest of river herring in place, and even with this prohibition on all harvest, these states have continued to see declines.

The petition notes that river herring are not subject to the requirements and protections of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) because they are not currently managed under an FMP as a stock, and therefore, are not federally managed in regard to overfishing and depleted stocks under the MSA. Even though river herring are caught and sold as bycatch, and FMPs are meant to minimize bycatch, the NRDC asserts that any provisions in FMPs meant to address bycatch of river herring have proven to be ineffective and inadequate. NRDC further asserts that bycatch reporting is inadequate and limited and that there are currently no FMPs under the MSA that specifically address bycatch and bycatch mortality of river herring.

The NRDC notes that currently the Mid-Atlantic Fisheries Management Council (MAFMC) is developing two amendments to two separate FMPs that include proposals for improving the monitoring of bycatch of river herring in these fisheries; however, it asserts that it was unknown whether the bycatch monitoring measures for river herring would be included in the final amendment.

NRDC also indicates that under the MSA or the Atlantic Coast Fisheries Act, NMFS has the potential to initiate emergency rulemaking or other actions to reduce bycatch of river herring in small mesh fisheries, but has declined to do so thus far. NRDC further notes that NMFS has declined to take emergency rulemaking actions for bycatch of river herring in small-mesh fisheries in New England and the Mid-Atlantic.

Federally managed stocks are required to have essential fish habitat (EFH) designated under the MSA; however, since river herring are not considered a federally managed stock under the MSA, EFH has not been designated for this species. A provision under the 1996

amendments to the MSA provides for comments from regional councils on activities that may affect anadromous fish habitat; however, the NRDC asserts that this provision has not provided any significant modifications to activities affecting anadromous fish habitat.

In addition to fisheries, the petition indicates that Federal laws and regulations have also failed to protect river herring and their habitat from threats such as poor water quality, dredging, and altered water flows. The petition briefly describes the Clean Water Act (CWA), the Federal Power Act (FPA), and the Anadromous Fish Conservation Act, and identifies where these regulations present inadequacies that are failing to protect river herring. NRDC notes that the CWA should limit discharge of pollutants into navigable waters and that some progress has been made in terms of industrial sources. NRDC also concludes that the CWA has not “adequately regulated nutrients and toxic pollutants originating from non-point sources.” In addition, some permits for dredging and excavation require permitting from the Army Corps of Engineers, and NRDC notes that these may benefit river herring through placing restrictions on the timing and location of activities in river herring habitats. The FPA allows for protection of fish and wildlife that may be affected by hydroelectric facilities. As mentioned previously, NRDC asserts that fish passage at hydroelectric facilities can be inefficient, and the dams themselves affect water flow which can pose a significant threat to river herring. Thus, according to NRDC, FPA protections for river herring are inadequate. The NRDC further states that the Anadromous Fish Conservation Act does not require any measures for river herring that would improve habitat, reduce bycatch, or mitigate other threats to river herring, and therefore provides inadequate protection for the species. The NRDC notes that there are Federal protections that may benefit river herring which are intended for other anadromous species such as Atlantic salmon and

shortnose sturgeon; however, it asserts that any benefits from these protections are minor and insufficient to fully protect river herring.

Other Natural or Manmade Factors Affecting Its Existence

The petition describes other natural or manmade factors that may be affecting river herring, including invasive species, impingement, entrainment, and water temperature alterations. The petition states that invasive species may threaten food sources for alewives and blueback herring. ASMFC (2008) describes the negative effect zebra mussel introduction to the Hudson River had on phytoplankton and zooplankton, and subsequently water quality. According to ASMFC (2008), a decrease in both micro and macro zooplankton as well as phytoplankton improved water clarity and increased shallow water zoobenthos by 10 percent. Early life stages of river herring feed on zooplankton as well as phytoplankton (ASMFC, 2008). Strayer et al. (2004) hypothesized that the introduction of this invasive species created competition for availability of the preferred food source of early life stages of river herring, and found that larval river herring abundance decreased with increased zebra mussel presence. Thus, according to the petition, invasive species introduction and subsequent water quality changes which may affect plankton abundance can decrease the abundance of early life stages of river herring.

As described previously, the petition asserts that various life stages of river herring may be impinged or entrained through water intake structures from commercial, agricultural, or municipal operations. These intake structures alter flow, and may cause direct mortality to various life stages of river herring if they are impinged or entrained by the intake. In addition, aside from direct mortality, the petition asserts that intakes alter flow, which can affect water

quality, temperature, substrate, velocity, and stream width and depth. NRDC suggests that these alterations can affect spawning migrations as well as spawning and nursery habitat, which could pose a significant threat to river herring.

Petition Finding

Based on the above information, which indicates ongoing multiple threats to both species as well as potential declines in both species throughout their ranges, and the criteria specified in 50 CFR 424.14(b)(2), we find that the petition presents substantial scientific and commercial information indicating that the petitioned action concerning alewife and blueback herring may be warranted. Under section 4(b)(3)(A) of the ESA, this positive 90-day finding requires NMFS to commence a status review of the species. During our status review, we will review the best available scientific and commercial information, including the effects of threats and ongoing conservation efforts on both species throughout their ranges. Alewife and blueback herring are now considered to be candidate species (69 FR 19976; April 15, 2004). Within 12 months of the receipt of the petition (August 5, 2011), we will make a finding as to whether listing alewife and/or blueback herring as endangered or threatened is warranted, as required by section 4(b)(3)(B) of the ESA. If listing these species is not warranted, we will determine whether any populations of these species meet the DPS policy criteria (61 FR 4722; February 7, 1996), and if so, whether any DPSs are endangered or threatened under the ESA. If listing either species (or any DPS) is warranted, we will publish a proposed listing determination and solicit public comments before deciding whether to publish a final determination to list them as endangered or threatened under the ESA.

References Cited

A complete list of the references used in this finding is available upon request (see ADDRESSES).

Information Solicited

To ensure the status review is based on the best available scientific and commercial data, we solicit information pertaining to alewife and blueback herring. Specifically, we solicit information in the following areas: (1) historical and current distribution and abundance of these species throughout their ranges; (2) population status and trends; (3) any current or planned activities that may adversely impact these species, especially as related to the five factors specified in section 4(a)(1) of the ESA and listed above; (4) ongoing efforts to protect and restore these species and their habitat; and (5) any biological information (life history, morphometrics, genetics, etc.) on these species. We request that all information be accompanied by: (1) supporting documentation such as maps and bibliographic references; and (2) the submitter's name, address, and any association, institution, or business that the person represents.

Peer Review

On July 1, 1994, NMFS, jointly with the U.S. Fish and Wildlife Service, published a series of policies regarding listings under the ESA, including a policy for peer review of scientific data (59 FR 34270). OMB issued its Final Information Quality Bulletin for Peer Review on December 16, 2004. The Bulletin became effective on June 16, 2005, and generally requires that all “influential scientific information” and “highly influential scientific information” disseminated on or after that date be peer reviewed. The intent of the peer review policy is to ensure that decisions are based on the best scientific and commercial data available. Independent peer reviewers will be selected to review the status review report from the academic and

scientific community, tribal and other Native American groups, Federal and state agencies, the private sector, and public interest groups.

Authority: 16 U.S.C. 1531 et seq.

Dated: October 27, 2011.

John Oliver,
Deputy Assistant Administrator for Operations,
National Marine Fisheries Service.

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